## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/006287

A. CLASSIFICATION OF SUBJECT MATTER Int.Cl <sup>7</sup> C21C7/06			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED  Minimum documentation searched (classification system followed by classification symbols)			
Int.Cl <sup>7</sup> C21C7/00-7/10			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  Jitsuyo Shinan Koho 1922–1996 Toroku Jitsuyo Shinan Koho 1994–2004			
Kokai Jitsuyo Shinan Koho - 1971-2004 Jitsuyo Shinan Toroku Koho 1996-2004			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
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C. DOCUMEN	TS CONSIDERED TO BE RELEVANT		Relevant to claim No.
Category*	Citation of document, with indication, where app		1-12
Υ .	JP 55-091923 A (Vuashipari Ku 11 July, 1980 (11.07.80),	tato Inteizetto),	112
	Claims		
	(Family: none)		đ
Y	JP 05-186813 A (Nisshin Steel Co., Ltd.),		1-12
	27 July, 1993 (27.07.93),		
	Claims; Par. No. [0005] (Family: none)		1
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Y	JP 2002-161309 A (NKK Corp.), 1-12 04 June, 2002 (O4.06.02),		
	Claims		
	(Family: none)		
1			9
Further documents are listed in the continuation of Box C. See patent family annex.			
* Special categories of cited documents:  "T" later document published after the international filing date date and not in conflict with the application but cited to unconflict with the application but		cation but cited to understand	
to be of particular relevance  "E" earlier application or patent but published on or after the international "X" document of particular relevance; the claimed invention cannot		claimed invention cannot be	
filing date		considered novel or cannot be cons step when the document is taken alon	idered to involve an inventive
		"Y" document of particular relevance; the considered to involve an inventive	claimed invention cannot be
special reason (as specified)  "O" document referring to an oral disclosure, use, ex hibition or other means		combined with one or more other suc being obvious to a person skilled in the	h documents, such combination
"P" document published prior to the international filing date but later than the priority date claimed		"&" document member of the same patent	
Date of the actual completion of the international search 26 July, 2004 (26.07.04)		Date of mailing of the international sea	
20 Sully, 2001 (2010)			
Name and mailing address of the ISA/		Authorized officer	
Japanese Patent Office			
Facsimile No. Telephone No.			
Form PCT/ISA/210 (second sheet) (January 2004)			